

ABSTRACT OF THE DISCLOSURE

A first estimator 13 estimates the position of a head based on a VCM driving signal u_1 and a voltage signal V_a output from a VCM 6 to output a first head position estimation signal x_{1est} . The first estimator 13 estimates the disturbance acting on a head supporting mechanism 8 to output a disturbance estimation signal τ_{dest} . A second estimator 15 estimates the displacement of the head based on a control signal c_2 for a fine adjustment actuator 7 to output a displacement estimation signal x_{2est} . The first head position estimation signal x_{1est} and the displacement estimation signal x_{2est} are added together to obtain a second head position estimation signal x_{est} . A position error signal e is generated using a head position signal x obtained by detecting the servo information and the second head position estimation signal x_{est} . A disturbance compensator 10 synthesizes a VCM control signal c_1 with the disturbance estimation signal τ_{dest} to generate the VCM driving signal u_1 .